



**RBA**

REVOLUTION  
IN BUSINESS  
AFFAIRS



**PRESENTATION TO:  
DON RIC  
27 June 2001**

**SMART Project Office**



# NAVY ERP PILOTS

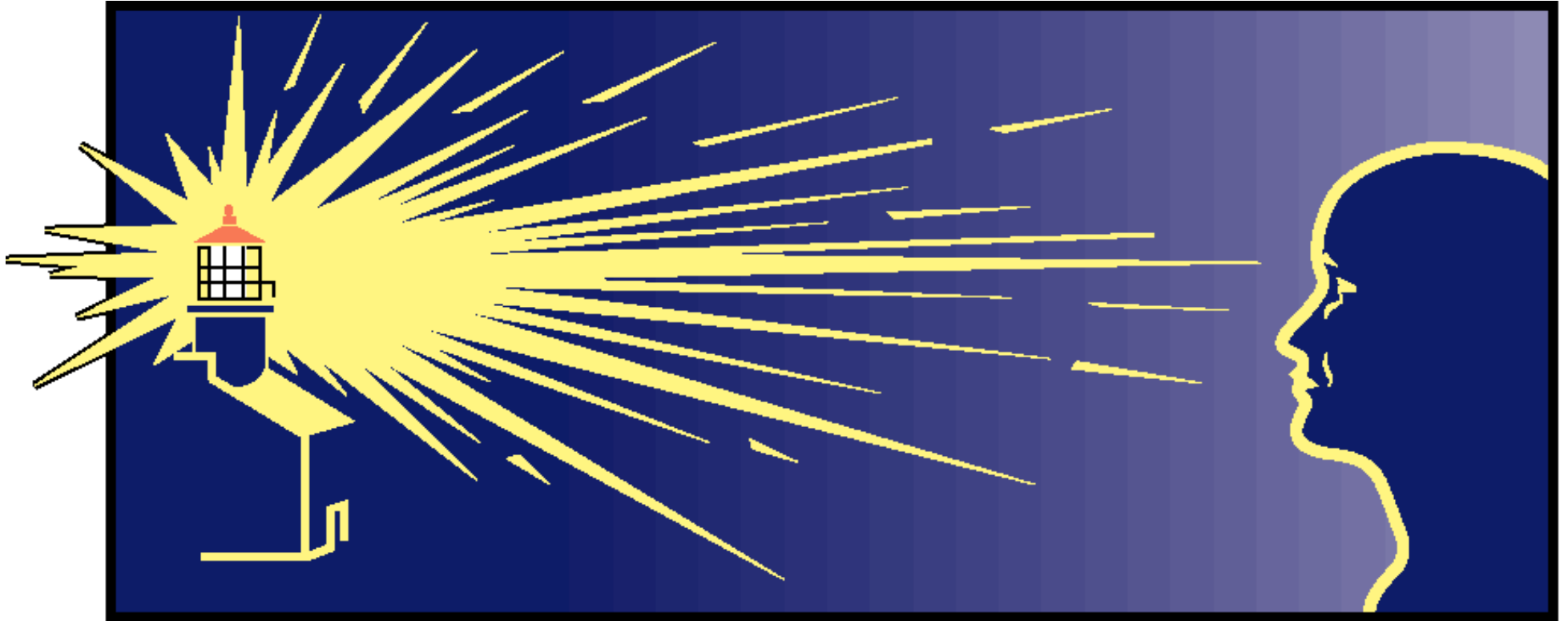
Pilot Core	Sponsor	Explore ERP Business Processes to Improve:	S/W
<b>Program Management (SIGMA)</b>  <b>Warfare Center Management NWCF Financial Management (CABRILLO)</b>	<b>NAVAIR SAP</b>	<b>Program Management Process to include linkage between contracting and financial systems</b>  <b>SPAWAR SAP Process</b>	
<b>Aviation Supply Chain / Maintenance Management (SMART)</b>	<b>NAVSUP / NAVAIR</b>	<b>Maintenance Planning and Material Ordering Processes (O, I, D level and NAVICP)</b>	<b>SAP</b>

**Regional Maintenance Funded NAVSEA / Regional Maintenance (NEMAS) CLF** **SAP**

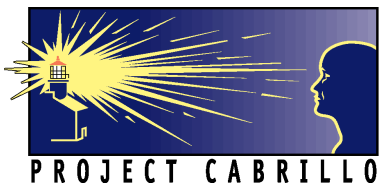
- Each pilot is 12 - 18 months

- NAVAIR and NAVSUP / NAVAIR Pilots use E-2 data as “proof of concept”

**SPAWAR NAWC NSWC NADEP NAVAUD DFAS**



**P R O J E C T   C A B R I L L O**



# PROJECT DESCRIPTION

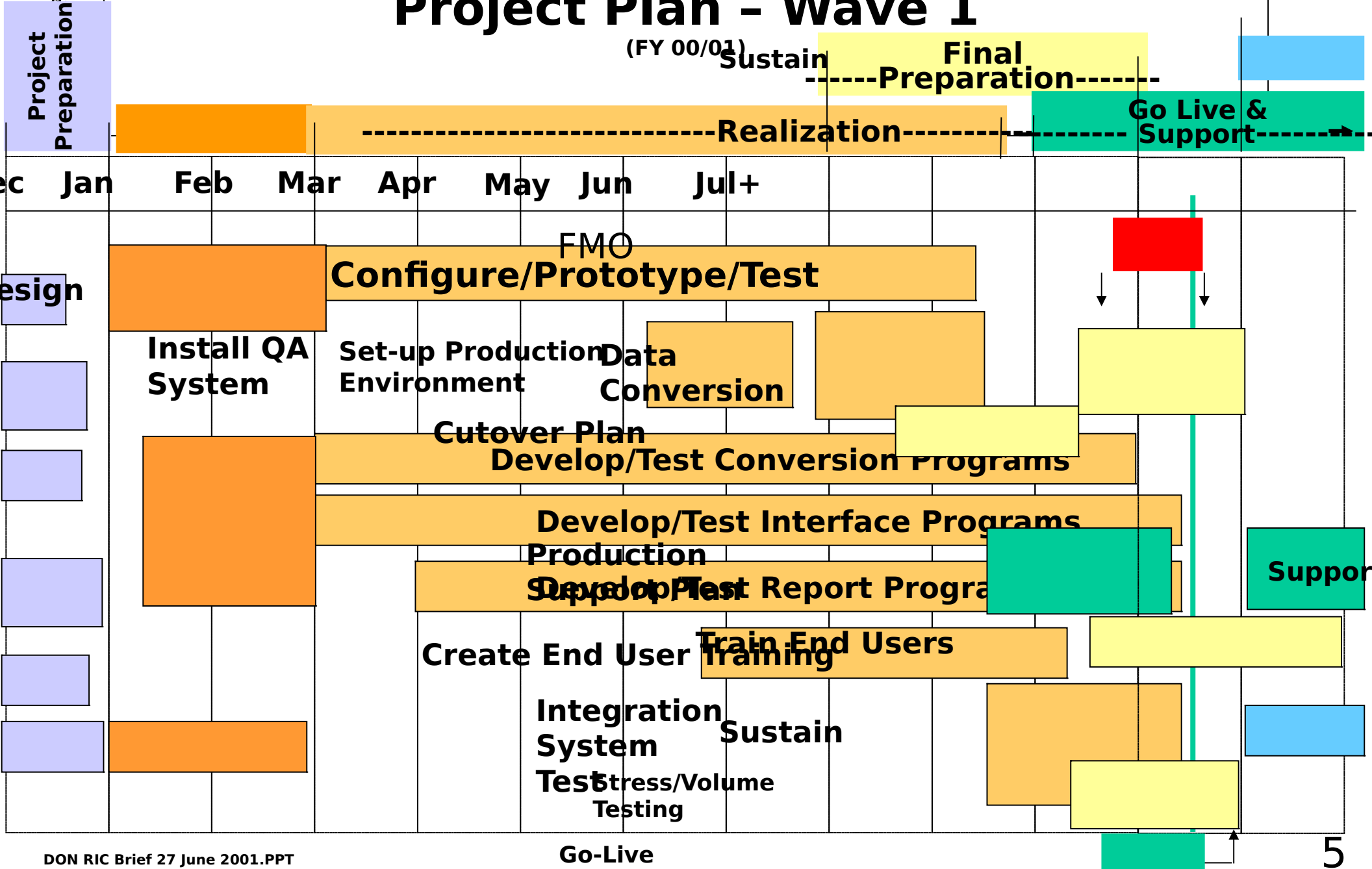
- **Core Business Functional Areas**

- Financial Management
  - **All financial activities including budgets, funds management, billings, payables, reporting and employee data**
- Procurement Management
  - **All buying activities for MRO items, from issuing PO, receipt of goods and processing vendor invoices**
- Asset Management
  - **Includes both real property and improvements. Tracks all assets from acquisition to disposal.**
- Project / Program Management
  - **Fully integrated project management system that ties together project management tools with finance, budgeting, procurement and asset management data**
- Strategic Management
  - **Planning and budgeting tool for both annual and long range planning. Will build upon annual budgeting / planning needs to develop a long range orientation for SSC-SD.**



# Project Plan - Wave 1

(FY 00/01)



# ***Naval Supply Systems Command***

# ***Naval Air Systems Command***



**Supply Maintenance Aviation Reengineering Team**



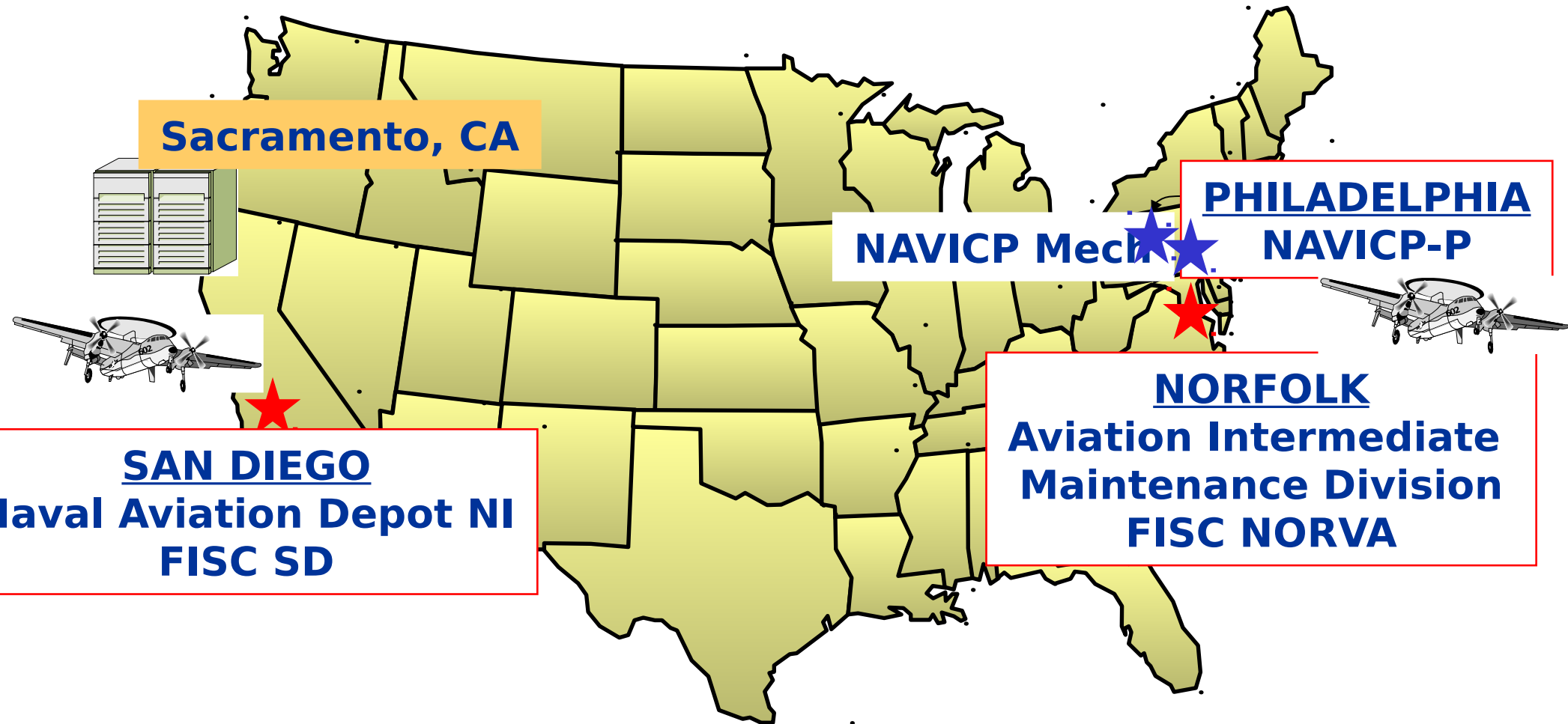
# SMART OVERVIEW

- **Jointly sponsored by NAVSUP and NAVAIR**
  - Phase I Study. . . Phase II Pilot. . . Phase III Enterprise Roll-out
- **E-2C Hawkeye I-Level maintenance with NALCOMIS OOMA and Depot interfaces**
  - E-2C Airframe, components (not including T-56 engine)
  - Activities. . . VAW-120, AIMD/ASD Norfolk, FISC Norfolk / San Diego, NADEP North Island
- **LM-2500 Gas Turbine Engine (interfaces to D-Level maintenance)**
  - Modules and components
  - Activities. . . NADEP North Island





# Phase II Location



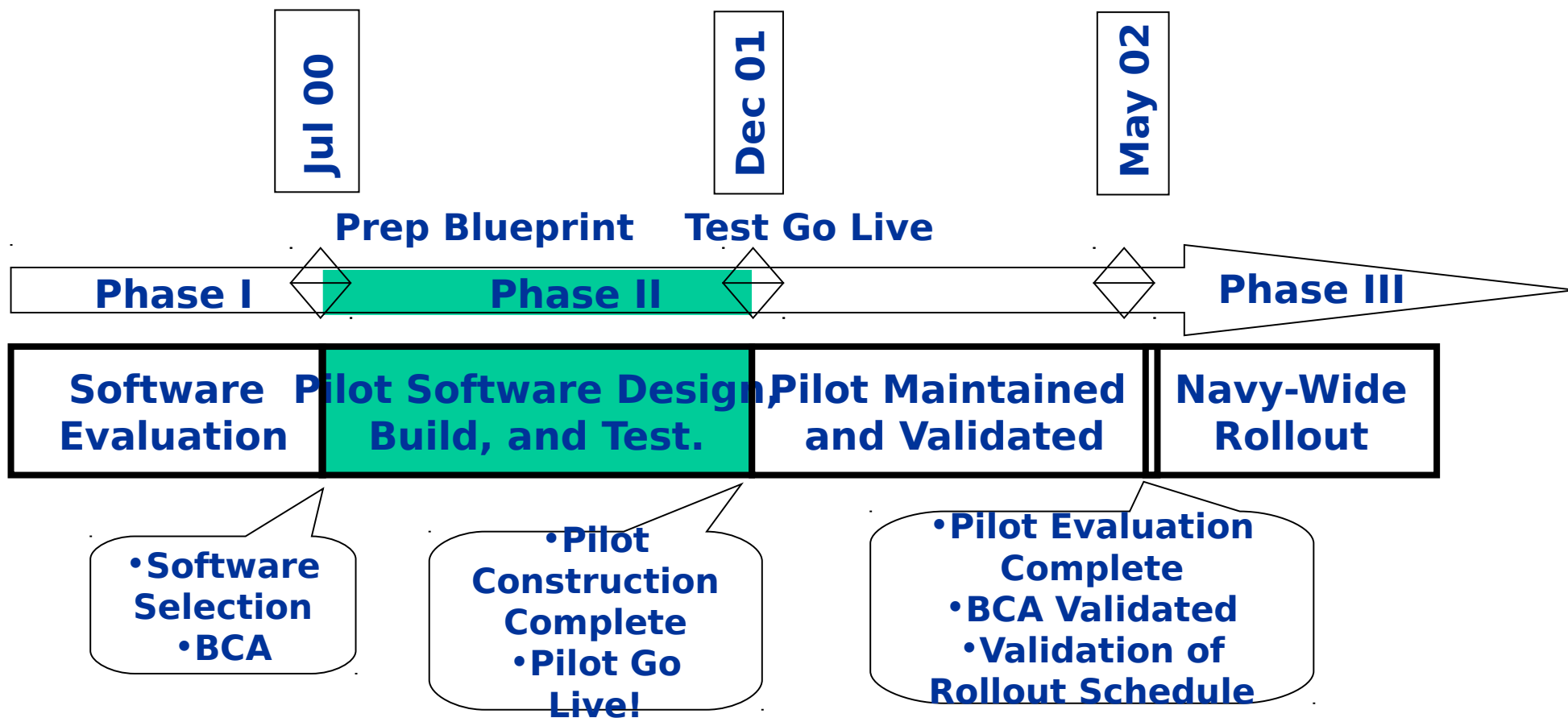
NAVICP= Naval Inventory Control Point

FISC= Fleet Industrial Support Center





# SMART Timeline



NAVAL AVIATION SYSTEMS

# Sigma Project

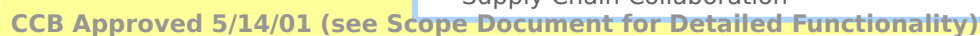
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*Bringing the NAVAIR TEAM  
together through  $\Sigma$ RP*

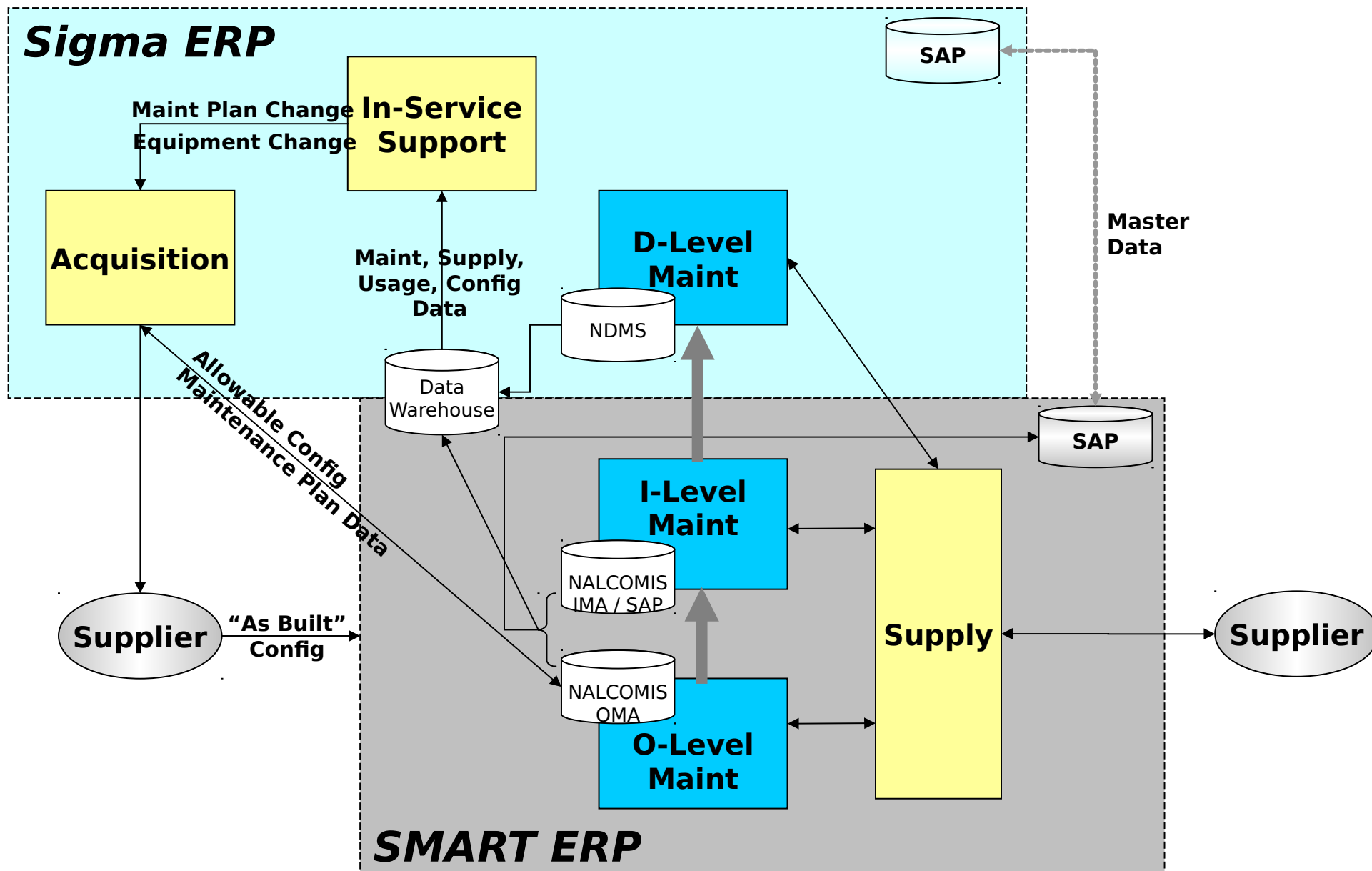
# PROGRAM MANAGEMENT SUMMARY

- **Program Management Functional requirements:**
  - Planning and Scheduling
  - Financial Management
  - Human Resource Management
  - Configuration Management / Asset Tracking
  - Limited Procurement
- **NAVAIR business processes will be reengineered within the bounds of SAP's best commercial practices**
- **Best practices, not current practices, will be implemented**
- **The SAP software will be implemented with no code modifications**

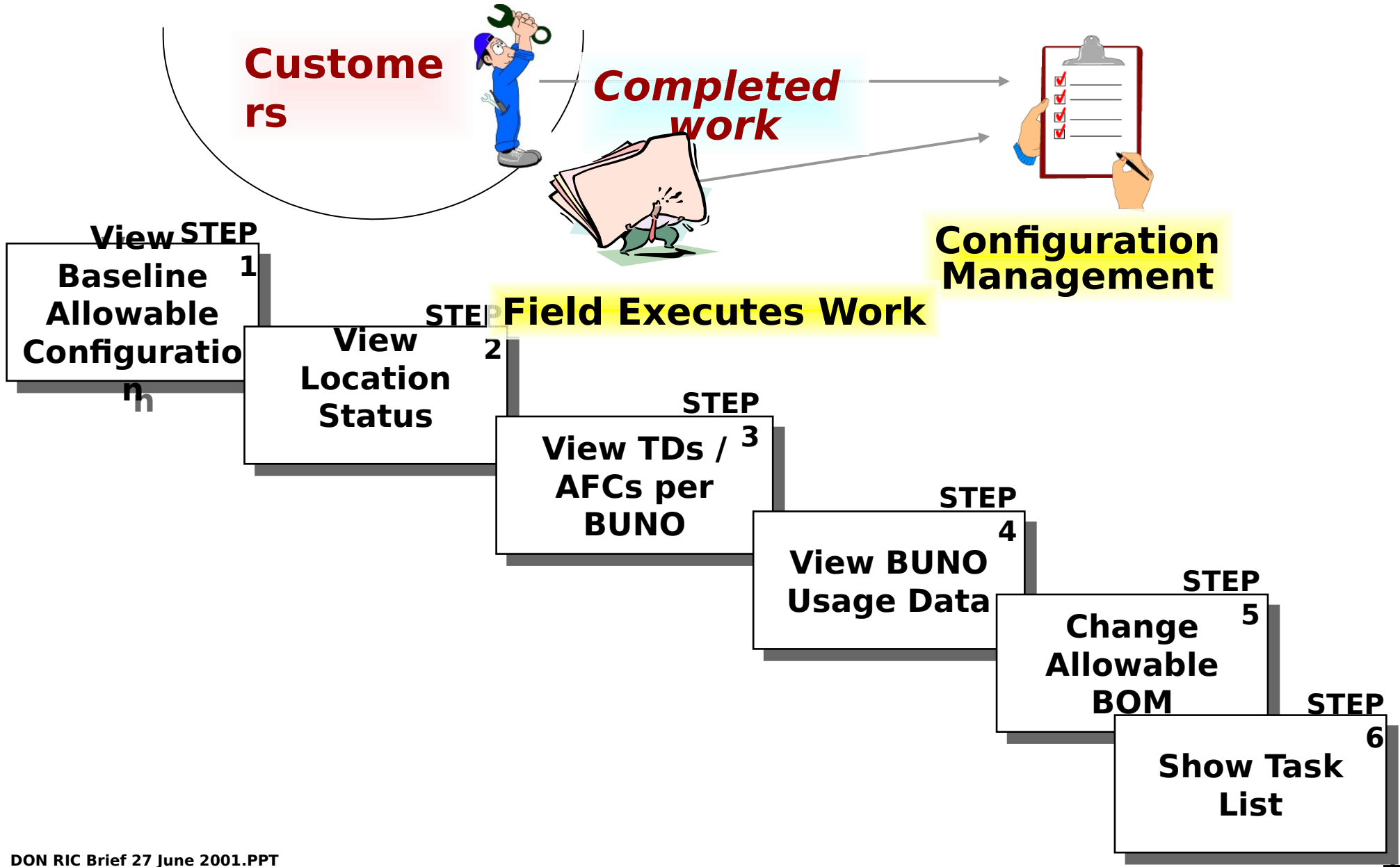




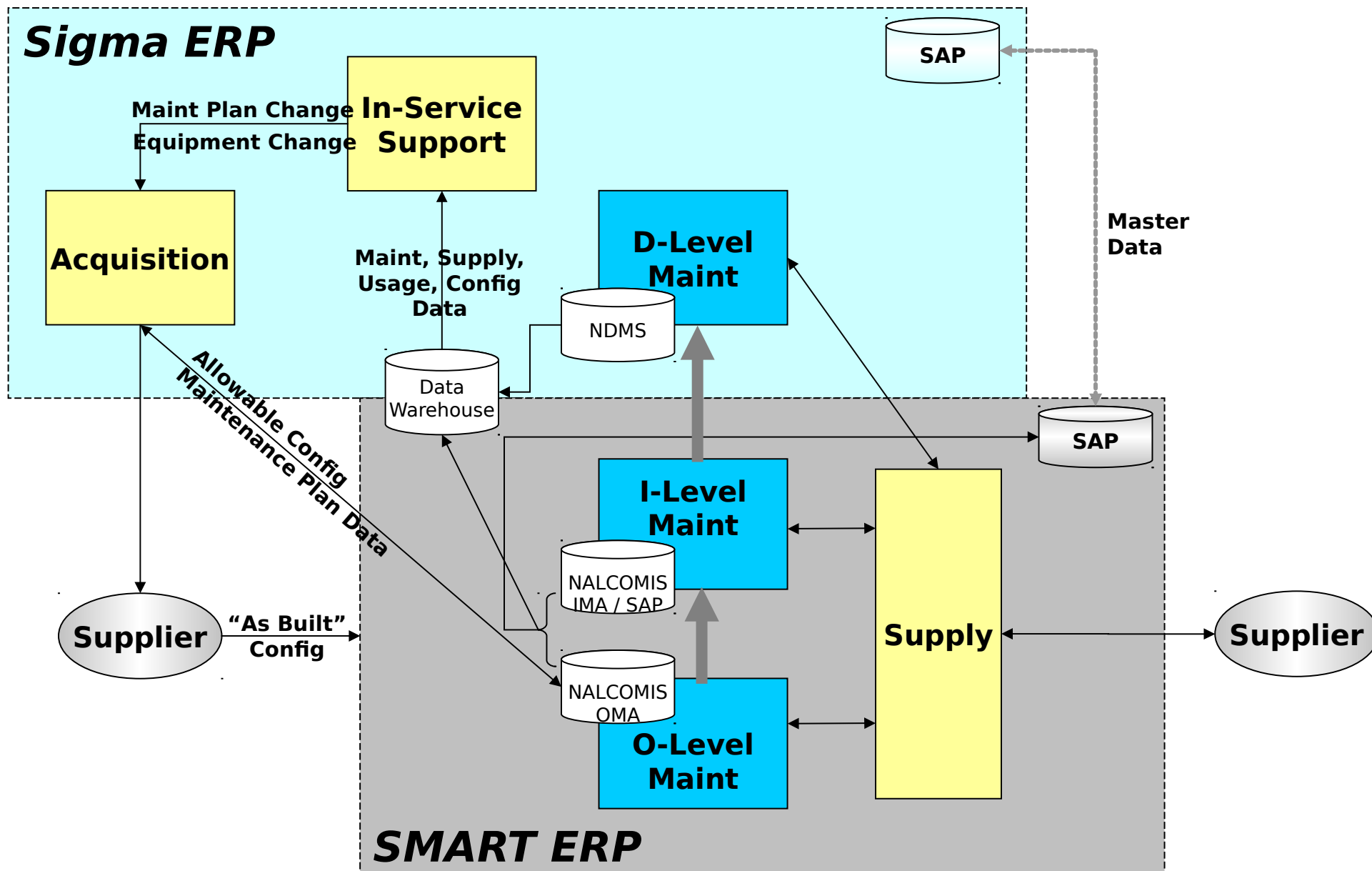
# NAVAL AVIATION CONFIG & MAINT MANAGEMENT



# SUMMARY DESCRIPTION: CONFIGURATION MANAGEMENT



# NAVAL AVIATION CONFIG & MAINT MANAGEMENT

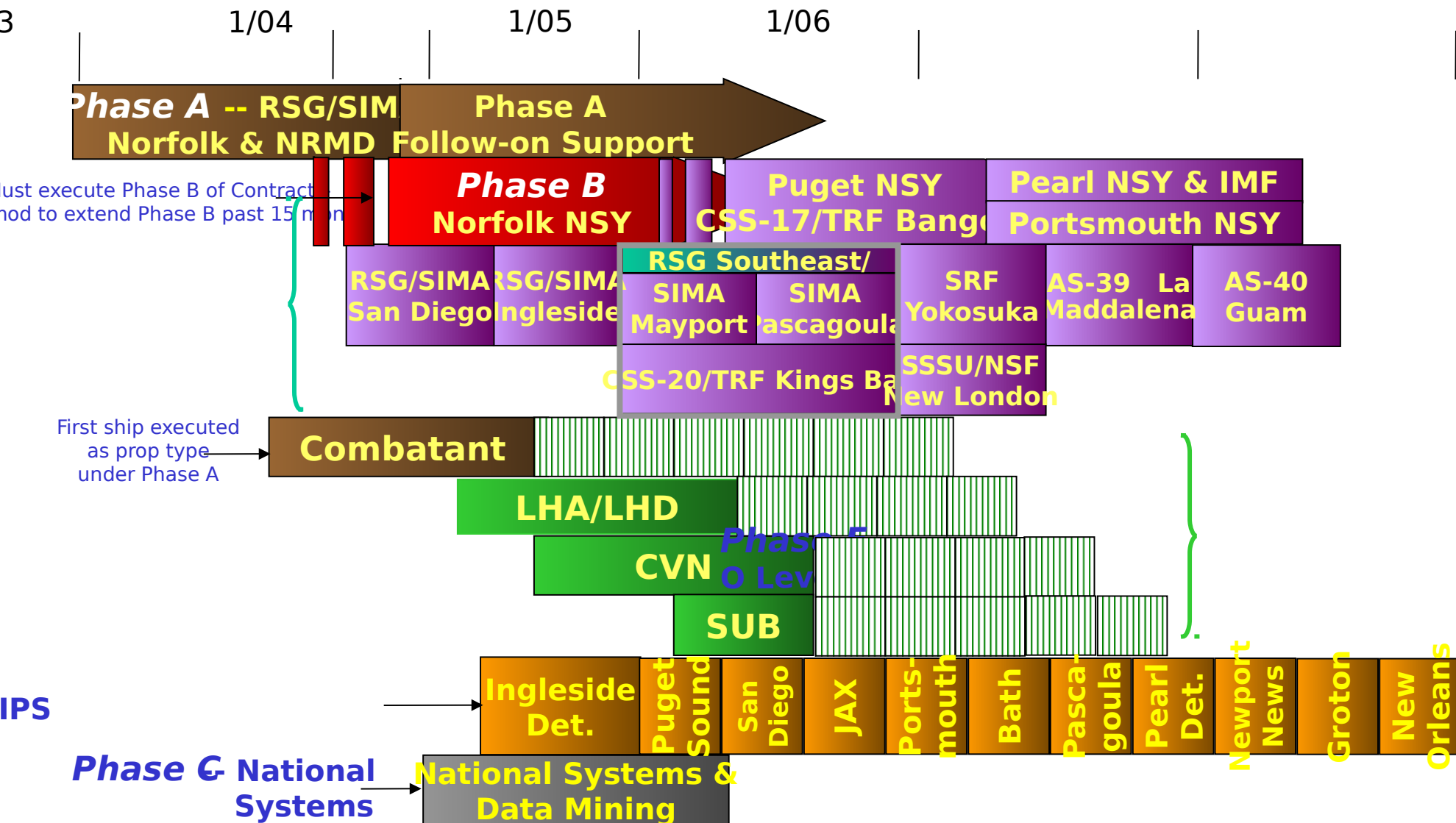






# Regional Maintenance ERP (NEMAIS) A Joint Fleet - NAVSEA Initiative

# Schedule: Notional Deployment



# ON-GOING EFFORTS

- **Master Data Meeting - 28 June @ WLO 1000**
- **IWAR (N814) Assessments underway; Visits scheduled as follows:**
  - **Cabrillo 20 June San Diego, CA** ✓ Complete
  - **Sigma 17 July Pax River, MD**
  - **SMART 18 July Mechanicsburg, PA**
  - **NEMAIS 20 July Norfolk, VA**
- **Configuration Management in SAP**
- **Cooperating with German MoD - Deployable Instance**
- **CNA ERP REPORT ISSUED - Feb 2001**
- **PBD 818 - Funding for DFAS Financial System**

## ICB Members

**Ms. Iona Evans**  
ERP Corporate Executive  
Naval Sea Systems Command

**Mr. Mike Petz**  
Program Manager - NETS  
Naval Sea Systems Command

**Mr. Dennis Distler**  
Enterprise Solutions Program  
Office (ESPO) Executive Director  
Naval Air Systems Command

**Mr. Kevin Fitzpatrick**  
Co-Program Manager - SMART  
Naval Supply Systems Command

**Mr. Edward Chermansky (Acting)**  
Co-Program Manager - SMART  
Naval Air Systems Command

**Mr. Rick Pierson**  
Program Manager - CABRILLO  
SPAWAR Systems Center - San  
Diego

## ICB Staff

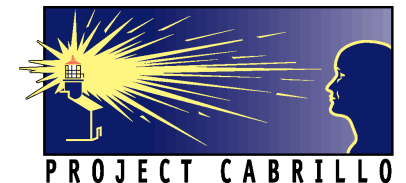
**Mr. Greg Huntington**  
ESPO - SIGMA  
Naval Air Systems Command

**Mr. Stan Beiter**  
SMART  
Naval Supply Systems Command

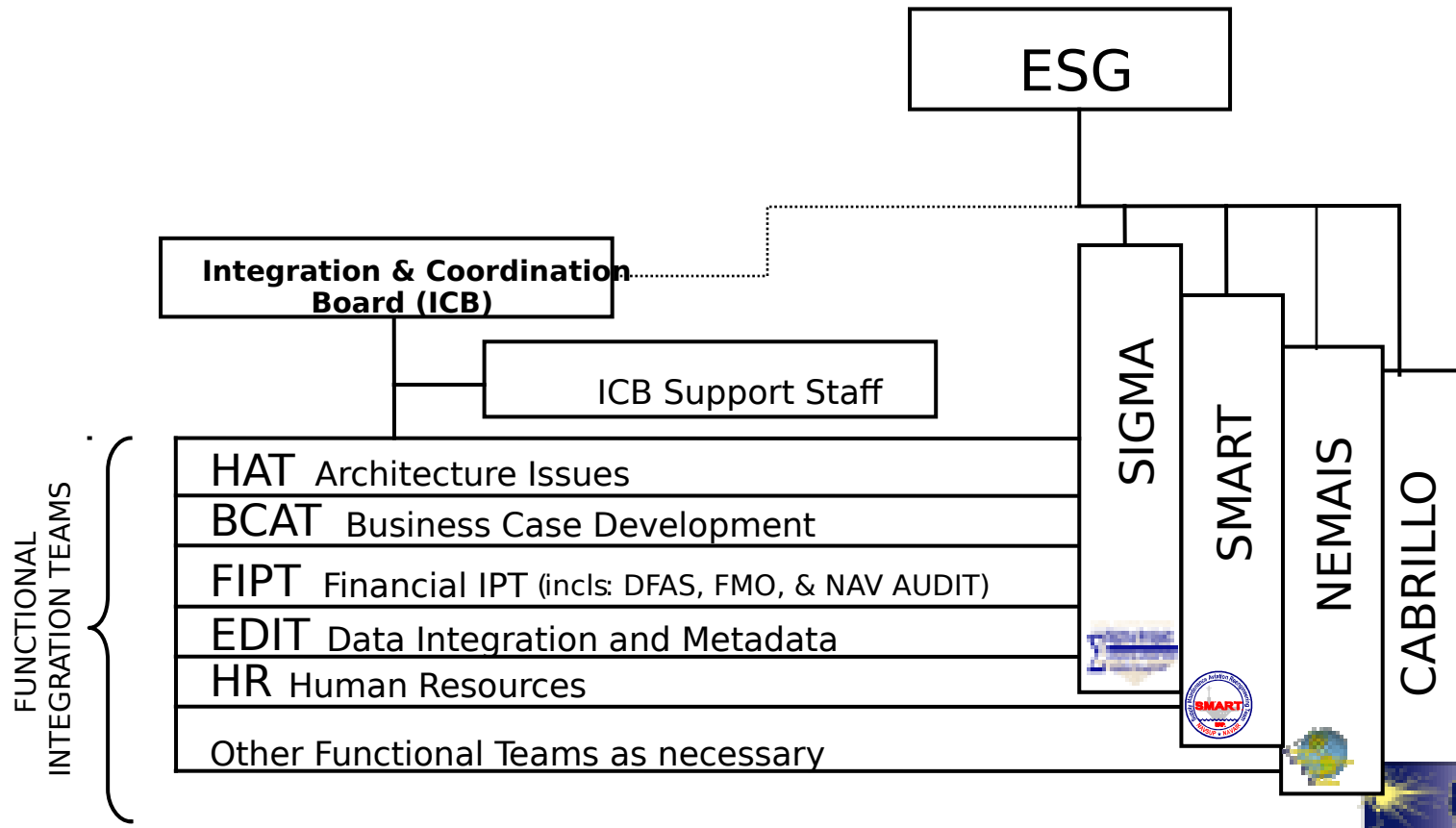
**Mr. Dave Noble**  
ERP Corporate Office  
Naval Sea Systems Command

**Ms. Gale Pennoyer**  
CABRILLO  
SPAWAR Systems Center - San  
Diego

# Integration and Coordination Board (ICB)



# ICB INTEGRATION TEAM STRUCTURE



# ICB Direct Support (Item 1.0)

## ICB Direct Support (items 1.1 - 1.5):

- Coordinate with ESG Secretariat
- Coordinate Strategic Planning
- Oversee Technical Advisory Services
- Coordinate User Groups
- Perform governance (sub-teams, contractors, tracking issues, etc.)



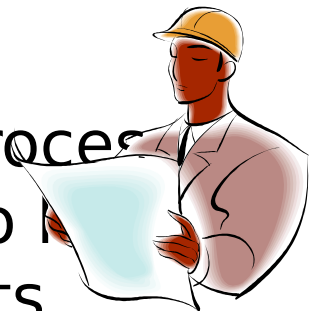


# Sr Tech Advisory Svcs (Item 2.0) Advisory Services:

- Engage industry expert(s) to assist in identifying ERP environment data commonality, configuration management, and security requirements.
  - Provides immediate assistance to on-going teams.
  - First efforts will focus on weapon system asset CM and master data coordination requirements.

## Technical Studies:

- Navy ERP Interoperability Project.
  - Concept involves developing a Business Process Architecture that projects can reference to achieve interoperability requirements.



# Navy ERP Model (Item 3.0)

Maintain the Navy ERP Model (item 3.10):

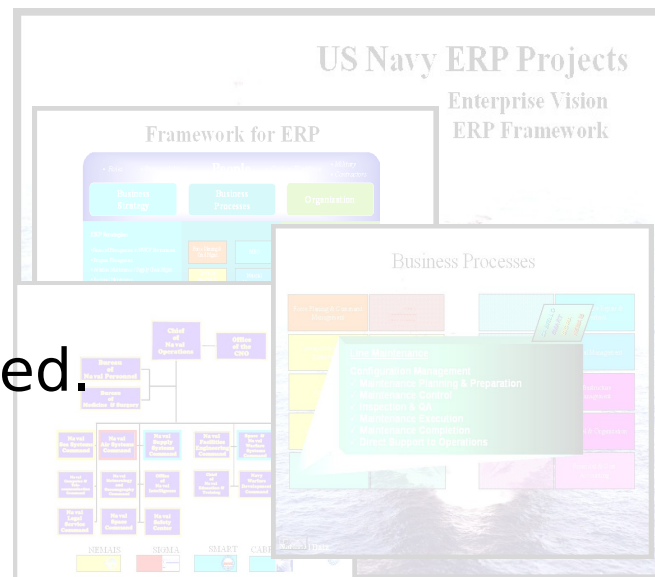
- 1st generation Navy ERP Model needs to be completed.
- Update DEIG solution map during next workshop - June 01.

Vision framework (item 3.20):

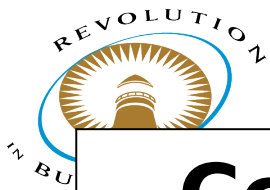
- Vision Presentation for July ESG.
  - ✓ Projects business processes needed.
  - ✓ Projects deployments needed.
- Next step ... business strategies,

people & security

Note: Funded by NAVSEA Corporate ERP.







# **Contractor Support for Teams (Item 4.0)**

- Contractor Support for ICB & teams:
  - ICB & EDIT support through NAVAIR BPA.
  - HAT/Security... investigating using SPAWAR at WNY.
  - FIPT (Note: already funded through 31 Dec 01)

# G&A Support / Other (Items 5.0 & 6.0)

## Item (5.0):

- Consolidating ESG and FIPT websites into ICB's:  
*www.erp.navy.mil*



## Item (6.0):

- Funding DFAS Legacy system analysis (\$136k annually)  
Remainder 2001 calendar year - \$68k.

Note: SOW & estimated travel expenses have been requested.  
Note: 2 - Does not include Website funded by NAVSEA Corporate ERP.

# EQUIPMENT MASTER

Equipment Edit Goto Extras Structure Environment System Help

Display Equipment : General data

Class overview Documents Measuring points/counters

Equipment 165295 Category Aircraft

Description AIRBORNE EARLY WARNING

Status AVLB FMC IN-S

Valid from 12/14/2000 Valid to 12/31/9999

General Location Organization Structure SerData Buno Info1

General data

Class			
FleetObjectType	AEBC	E-2C	
AuthorizGroup	CNAP	COMNAVAIRPAC	
Weight	0.000	Size/dimension	
Inventory no.		Start-up date	12/10/1997

Reference data

AcquisValue	0.00	Acquistn. date	12/10/1997
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Manufacturer data

Manufacturer	GRUMMAN	ManufCountry	US
Model number	E2C	Constr.yr/mth	1997 / 12
ManufPartNo.			
ManufSerialNo.	A166		

BuNo

Attributes

# ALLOWABLE CONFIGURATION

## Material Structure: Structure List

Expand/collapse

Material 50E2200000  
Component desc. TURBOSHAFT ENGINE

id from 04/16/01

**WRA**

**SRA**

**NSN**

50E223DUH0	TURBINE ROTOR ASSEMBLY	1	EA
50E223DUH1	1ST STAGE TURBINE WHEEL ASSEMBLY *	1	EA
2840000127	WHEEL ASSEMBLY	1	EA
2840001415	WHEEL ASSEMBLY	1	EA
2840012881	WHEEL ASSEMBLY	1	EA
50E223DUH2	TURBINE 1ST-2ND STAGE SPACER ASSY *	1	EA
2840000127040	TURBINE 1ST-2ND STAGE SPACER ASSY	1	EA
5365012887651	SPACER ASSY	1	EA
5365013693241	SPACER ASSY	1	EA
50E223DUH3	ASSEMBLY *	1	EA
2840000127060	2ND STAGE TURBINE WHEEL ASSEMBLY	1	EA
2840012885090	2ND STAGE TURBINE WHEEL ASSEMBLY	1	EA
50E223DUH4	TURBINE 2ND-3RD STAGE SPACER ASSY *	1	EA
2840000110693	TURBINE 2ND-3RD STAGE SPACER ASSY	1	EA
2840013397547	TURBINE 2ND-3RD STAGE SPACER ASSY	1	EA
5365013693242	TURBINE 2ND-3RD STAGE SPACER ASSY	1	EA
50E223DUH5	3RD STAGE TURBINE WHEEL ASSEMBLY *	1	EA
2840000127065	3RD STAGE TURBINE WHEEL ASSEMBLY	1	EA
2840012957560	3RD STAGE TURBINE WHEEL ASSEMBLY	1	EA
50E223DUH6	TURBINE 3RD-4TH STAGE SPACER ASSY *	1	EA
2840000127055	TURBINE 3RD-4TH STAGE SPACER ASSY	1	EA

# ALLOWABLE CONFIGURATION

**Material Structure: Structure List**

Material: 50E1400000 Valid from: 01/01/01  
Component desc.: DIRECTIONAL FLT CONTROLS/LIFT SYSTEMS

Material	Description	Quantity	Unit
50E1400000	DIRECTIONAL FLT CONTROLS/LIFT SYSTEMS	1	EA
50E14F1000	ELEVATOR CONTROL SYSTEM		
50E14F1100	ELEVATOR SYSTEM RIGGING	1	EA
50E14F1200	ELEVATOR MECHANICAL LINKAGE	1	EA
50E14F1300	ELEVATOR FEEL/TRIM SYSTEM	1	EA
50E14F1400	ELEVATOR HYDRAULIC		
50E14F1410	ELEVATOR ACTUATOR	1	EA
1650001068508	ELEVATOR TRIM ACTUATOR (ALUMINUM)	1	EA
1650000998059	CYLINDER ASSEMBLY A	1	EA
16500013848736	ELEVATOR TRIM ACTUATOR (ALUMINUM)	1	EA
16800014370498	ELEVATOR TRIM ACTUATOR (STEEL)	1	EA
50E14F1420	ELEVATOR SYSTEM CHECK VALVE, PRESSURE L	1	EA
50E14F1430	"ELEVATOR SYSTEM CHECK VALVE, PRESSURE L	1	EA
50E14F1440	"ELEVATOR SYSTEM HOSE ASSY, PRESSURE LIN	1	EA
50E14F1500	ELEVATOR SYSTEM ELECTRICAL	1	EA
50E14F1600	ELEVATOR SURFACE	1	EA
50E14F2000	RUDDER CONTROL SYSTEM	1	EA
50E14F3000	AILERON CONTROL SYSTEM	1	EA

**Directional Flight Control**

**Elevator**

**Aluminum**

**New steel components added after TD incorporation**

**Display Document: Basic Data Tech Directive (TD)**

Document

Document: 10000000007 Part: 000 Version: 01

Deletion ind. CAD indicator Document setting Hierarchy

Document data Descriptions Object links Originals

Document data

Description: TDC-50-433 E2C Airframe Change No. 433

Document status: I Incorporated 02/26/2001-...

User: PERREGOML Mike Perrego

Laboratory/office:

Change number: Valid from:

Authorization group:

Superior document

Document: Type: Part: Version:

Originals

Appl.	Application	Storage cat.
PDF	E2C Airframe Change No. TDC 050-433	

**Airframe Change #433**

**Display Document: Basic Data Tech Directive (TD)**

Document

Document: 10000000007 Part: 000 Version: 01

Deletion ind. CAD indicator Document setting Hierarchy

Document data Descriptions Object links Originals

Equipment master

Equipment	ShortTxt
160009	AIRBORNE EARLY WARNING
161782	AIRBORNE EARLY WARNING
162616	AIRBORNE EARLY WARNING
162618	AIRBORNE EARLY WARNING
162798	AIRBORNE EARLY WARNING
163026	AIRBORNE EARLY WARNING
163028	AIRBORNE EARLY WARNING
163537	AIRBORNE EARLY WARNING
163538	AIRBORNE EARLY WARNING
163695	AIRBORNE EARLY WARNING
163698	AIRBORNE EARLY WARNING
164108	AIRBORNE EARLY WARNING
164352	AIRBORNE EARLY WARNING
164483	AIRBORNE EARLY WARNING
164485	AIRBORNE EARLY WARNING
164493	AIRBORNE EARLY WARNING

**Aircraft Incorporated On**

# TD's ON BuNo 165295

Product Structure: Validity date 04/15/2001

Product structure	Descript.
▶ 161782	AIRBORNE EARLY WARNING
▶ 162616	AIRBORNE EARLY WARNING
▶ 162618	AIRBORNE EARLY WARNING
▶ 162798	AIRBORNE EARLY WARNING
▶ 163026	AIRBORNE EARLY WARNING
▶ 163028	AIRBORNE EARLY WARNING
▶ 163537	AIRBORNE EARLY WARNING
▶ 163538	AIRBORNE EARLY WARNING
▶ 163695	AIRBORNE EARLY WARNING
▶ 163698	AIRBORNE EARLY WARNING
▶ 164108	AIRBORNE EARLY WARNING
▶ 164352	AIRBORNE EARLY WARNING
▶ 164483	AIRBORNE EARLY WARNING
▶ 164485	AIRBORNE EARLY WARNING
▶ 164493	AIRBORNE EARLY WARNING
▶ 164497	AIRBORNE EARLY WARNING
▶ 165295	AIRBORNE EARLY WARNING
▶ Subordinate equipments	
▶ Material	
▼ Documents	
TD 10000000007 000 01	TDC-50-433 E2C Airframe Change No. 433
▶ TD 10000000011 000 01	TDC-74-0350 E2C AFB No. 350
▶ TD 10000000012 000 01	TDC-50-370 E2C Airframe Change No. 370
▶ TD 10000000013 000 01	TDC-74-0352 E2C AFB No. 352
▶ TD 10000000014 000 01	TDC-74-0354 E2C AFB No. 354
▶ TD 10000000048 000 01	TDC-50-424 E2C Airframe Change No. 424
▶ TD 10000000049 000 01	TDC-50-424 E2C AFC Change No. 424 Part 2

Steel Bodied  
Elevator  
Actuator



**BuNo 165295**

## Catapults

## Tail Hook

## Flight Hours

## Landings

## Carrier Bolts

**Arrested Landings**

**DON RIC Brief 27 June 2001.PPT**



# Maintenance Steps

## Change General Task List: Operation Overview

Group 34 A1-E2C2A-NDI-000 Nondestructive Inspect Grp. ct.1

General operation overview

Op...	Sb...	Work ctr	Plnt	Ctrl	Description	L..	Work	Un.
0010		PAX1	1001	PM01	Electrically (static) ground aircraft	<input checked="" type="checkbox"/>		
0020		PAX1	1001	PM01	Prepare aircraft for ground maintenance	<input checked="" type="checkbox"/>		
0030		PAX1	1001	PM01	Prepare Actuator Assembly	<input checked="" type="checkbox"/>		
0030	0010	PAX1	1001	PM01	Remove and retain machine bolts	<input checked="" type="checkbox"/>		
0030	0020	PAX1	1001	PM01	Remove and retain anti-rotation arm	<input checked="" type="checkbox"/>		
0030	0030	PAX1	1001	PM01	Loosen spanner nut	<input checked="" type="checkbox"/>		
0030	0040	PAX1	1001	PM01	Remove Paint	<input checked="" type="checkbox"/>		
0030	0050	PAX1	1001	PM01	Clean inspection areas	<input checked="" type="checkbox"/>		
0030	0060	PAX1	1001	PM01	Move rod end of actuator out	<input checked="" type="checkbox"/>		
0040		PAX1	1001	PM01	Set up, standardize, and calibrate	<input checked="" type="checkbox"/>		
0050		PAX1	1001	PM01	Inspect	<input checked="" type="checkbox"/>		
0080		PAX1	1001	PM01	Tag or Reassemble actuator	<input checked="" type="checkbox"/>		
0090		PAX1	1001	PM01		<input type="checkbox"/>		
0100		PAX1	1001	PM01		<input type="checkbox"/>		
0110		PAX1	1001	PM01		<input type="checkbox"/>		
0120		PAX1	1001	PM01		<input type="checkbox"/>		
0130		PAX1	1001	PM01		<input type="checkbox"/>		
0140		PAX1	1001	PM01		<input type="checkbox"/>		
0150		PAX1	1001	PM01		<input type="checkbox"/>		

MntP Components Rel P... SPack. Insp.c Entry 1

### Change General Task List: Maintenance Package Overview

[illegible]

# Maintenance Frequency

# EQUIPMENT MASTER

Display Equipment: Equipment List

Equipment No	Description	C...	Con...	Object Type	Const Type	Location	Auth...	Ser No.	User Status
163027	AIRBORNE EARLY WARNING	10	1987	AEBC	E2C ALLOWABLE BASELINE	VAW-126	CNAL	A120	FMC IN-S
163028	AIRBORNE EARLY WARNING	01	1988					A121	FM
161341	AIRBORNE EARLY WARNING	04	1982			VAW-77	CNRF	A070	FM
161783	AIRBORNE EARLY WARNING	11	1984					A091	FMC IN-S
162615	AIRBORNE EARLY WARNING	06	1985					A097	FMC IN-S
162798	AIRBORNE EARLY WARNING	09	1986					A106	FMC IN-S
161229	AIRBORNE EARLY WARNING	02	1982			VAW-117		A069	FMC IN-S
161346	AIRBORNE EARLY WARNING	02	1983					A079	FMC IN-S
162619	AIRBORNE EARLY WARNING	03	1986					A104	FMC IN-S
162802	AIRBORNE EARLY WARNING	02	1987					A113	FMC IN-S
159109	AIRBORNE EARLY WARNING	08	1974				NASC	A016	NMC DEPC
163535	AIRBORNE EARLY WARNING	05	1988		E2C ALLOWABLE Gp 1 Baseline	FWATS	CNAL	A123	NMC RDTE
163536	AIRBORNE EARLY WARNING	06	1988			GRUMAN A...		A124	FMC IN-S
163851	AIRBORNE EARLY WARNING	09	1989					A132	FMC IN-S
163537	AIRBORNE EARLY WARNING	08	1988		E2C ALLOWABLE Gp II(C) Coop. Eng...	FWATS		A133	FMC IN-S
163849	AIRBORNE EARLY WARNING	06	1989			GRUMAN A...		A134	FMC IN-S
164109	AIRBORNE EARLY WARNING	01	1991		E2C ALLOWABLE Gp II(M) Mission Co...	FWATS		A135	FMC IN-S
164111	AIRBORNE EARLY WARNING	06	1991			VAW-117	CNAP	A143	FMC IN-S
164112	AIRBORNE EARLY WARNING	08	1991					A144	FMC IN-S
164352	AIRBORNE EARLY WARNING	10	1991					A145	FMC IN-S
164355	AIRBORNE EARLY WARNING	04	1992					A148	FMC IN-S
163698	AIRBORNE EARLY WARNING	07	1990		E2C ALLOWABLE Gp II(N) NAV Upgrade	VAW-115		A138	FMC IN-S
164107	AIRBORNE EARLY WARNING	09	1990					A139	FMC IN-S
165294	AIRBORNE EARLY WARNING	10	1997					A165	FMC IN-S
165295	AIRBORNE EARLY WARNING	12	1997					A166	FMC IN-S
165296	AIRBORNE EARLY WARNING	08	1998					A167	FMC IN-S
165297	AIRBORNE EARLY WARNING	10	1998			VAW-120	CNAL	A168	FMC IN-S
165300	AIRBORNE EARLY WARNING	04	1999					A171	FMC IN-S
165302	AIRBORNE EARLY WARNING	03	2000					A175	FMC IN-S